

ABSTRACT OF THE DISCLOSURE

5 A method and apparatus encodes data on a clock pulse signal by phase
modulating a clock pulse signal by introducing a sinusoidal jitter modulation to the clock
pulse signal to selectively introduce intentional jitter at clock pulse transitions, wherein the
sinusoidal jitter has selectable jitter frequencies each having a given amplitude. This is
followed by a data signal which may include additional data that has an encoded format of
10 binary ones and zeros, such that the appearance of the binary one in the data signal causes
the phase modulation of the clock pulse signal by the selection of one of the jitter frequencies
of a given amplitude. The appearance of a binary zero causes the selection of another
frequency of a given amplitude to thereby modulate the clock pulse signal resulting in a
phase modulated clock pulse signal that includes the encoded data in the data or additional
signal.

SPECIFICATION

To All Whom It May Concern:

Be it known that I, **Ossi Ilari Grohn**, a citizen of Finland residing at 106 Spindle
Creek Ct., Apex, North Carolina 27502, has invented a certain new and useful **SYSTEM**
5 **AND METHOD TO ENHANCE THE CAPACITY OF A COMMUNICATION LINK**,
of which the following is a specification.